

Basis for Conclusions for Land Sector and Removals Standard v1.0

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1 Introduction

1.1 Definitions

- 1.1.1 "Advisory Committee" refers to an advisory body convened under Greenhouse Gas (GHG) Protocol's former governance structure, which provided strategic guidance on the goals and direction of a specific standard development project.
- 1.1.2 "Co-Hosts" refers to the co-hosts of GHG Protocol, i.e., World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). GHG Protocol is an unincorporated joint initiative of WRI and WBCSD.
- 1.1.3 "GHG Protocol" describes the partnership established between the Co-Hosts to work with academia, businesses, governments, industry associations, nongovernmental organizations and others to develop the most credible, accessible and widely used GHG accounting and reporting standards and to actively support their global adoption and implementation in order to enable all private and public entities to account for and reduce their GHG emissions in line with the global warming limits required by science.
- 1.1.4 "Independent Standards Board" (ISB) describes the body that oversees the standards development process, including but not limited to advising the GHG Protocol Steering Committee (SC) on the need for, objectives and scope of new and/or revised standards, reviewing and approving GHG Protocol Standards according to the GHG Protocol Standard Development and Revision Procedure, appointing Technical Working Group (TWG) members, and making decisions related to the content of standards.
- 1.1.5 "Secretariat" describes the body that runs the day-to-day activities of GHG Protocol, including but not limited to drafting standards and supporting the SC and ISB with meetings and documentation.
- 1.1.6 "Standard" describes any normative document informed by subject matter experts and approved by GHG Protocol governance bodies that provides guidance on the accounting of GHG emissions and supports implementation.
- 1.1.7 "Steering Committee" describes the body that provides strategic guidance on the goals and direction of GHG Protocol, including advising the Co-Hosts on the optimal organizational setup and governance structure. It approves the GHG Protocol strategy, including its overarching mission, vision, short- and long-term strategic goals, appoints ISB members, decides whether new standards or revisions are needed, and ratifies the decisions of the ISB to publish final standards.
- 1.1.8 "Technical Working Groups" are the multi-stakeholder bodies that support the development of GHG Protocol Standards' technical content according to the GHG Protocol Standard Development and Revision Procedure.

1.2 Abbreviations

The following abbreviations are used in this document:

AC	Advisory Committee
FCA	Forest Carbon Accounting
GHG	Greenhouse Gas
GHG Protocol	Greenhouse Gas Protocol
ISB	Independent Standards Board
LSR	Land sector and removals
LSRS	Land Sector and Removals Standard
SC	Steering Committee
ToR	Terms of Reference
TWG	Technical Working Group
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

1.3 About this document

This Basis for Conclusions report has been prepared in adherence with section 4.8.2 of the *GHG Protocol Standard Development and Revision Procedure*, the Independent Standards Board (ISB) Terms of Reference (ToR), and the Steering Committee (SC) ToR to facilitate SC ratification of the ISB’s decisions on the topic of leakage in the Land Sector and Removals Standard (LSRS).

Information on the scope of the ISB’s decisions and SC ratification can be found in sections 2.2 and 2.3 of this report, respectively.

This Basis for Conclusions includes:

- Background on the scope of the LSRS
- A summary of the standard development process prior to the formation of the ISB;
- A summary of the standard development process following the formation of the ISB;
- A clarification on the scope of the topics considered by the ISB within the LSRS;
- A clarification on the scope of the Steering Committee ratification;
- Rationale for ISB decisions on agricultural leakage;
- Summary of the ISB’s deliberations on forest carbon accounting (FCA);
- Background on the close out of the standard development process under the previous governance structure;

2 Executive Summary

The ISB requests SC ratification of the ISB’s decisions on the topic of leakage in the LSRS in accordance with the requirements for ratification in section 4.8.2 of the Standard Development and Revision Procedure and section 4.4.2 of the ISB ToR, as summarized in Table 1. The ISB attests that the Standard Development and Revision Procedure and ISB ToR were properly followed and that its decisions on agricultural leakage are aligned with GHG Protocol’s mission, vision, and strategy.

Table 2. Summary of requirements for SC ratification.

Requirement for Ratification	Status	Remarks
Approved procedures have been followed and deviations described, if any.	Completed	
Explanation of the main issues of contention and concerns raised by TWG members during the process and how they have been responded to are summarized.	Completed	See chapter 8 (land carbon leakage requirement 13), chapter 17 box 17.1 (recommendations on net targets to programs, regulators and companies not participating in target setting programs) and chapter 20 (additional reporting of aggregate values requirement 33)
Comments received during any public consultation periods, and pilot testing, if any, and an explanation of how these have been responded to in the final draft of the standard are summarized.	N/A	Pilot testing and public consultation were conducted as part of the LSRS development process prior to the current governance structure. These results therefore fall outside of the scope of review.
Confirmation that this public consultation summary has been published on the GHG Protocol website.	N/A	Topline consultation themes and a description of the process to address them were published on the GHG Protocol website in April 2023 and June 2023 . Public consultation and pilot testing were conducted prior to the current governance

		structure and this requirement falls outside the scope of review.
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3 Background

3.1 Scope of the Land Sector and Removals Standard

The LSRS will explain how companies account for and report GHG emissions and removals from agricultural land management, land use change, biogenic products, carbon dioxide removal technologies, and related activities in GHG inventories. Version 1 of the LSRS does not apply to forestry. It builds upon existing GHG Protocol corporate-level standards and guidance, including the *Corporate Standard* and *Scope 3 Standard*. The standard will play a critical role in informing corporate land sector and removal mitigation strategies and is intended to serve as the accounting basis for relevant target-setting and reporting initiatives.

3.2 LSRS development under former GHG Protocol governance structure

The majority of the LSRS was developed under GHG Protocol’s former governance structure, as detailed in the [Greenhouse Gas Protocol Land Sector and Removals Initiative Project Overview](#), available on the GHG Protocol website. In early 2019, GHG Protocol conducted a stakeholder survey to assess demand for additional guidance on natural and technological carbon dioxide removals, bioenergy, land use and land use change. Informed by results from the survey, a scope of work was developed, and the process formally began in 2020 with the formation of the Land Sector and Removals (LSR) Advisory Committee (AC) and TWG. Together, these bodies included over 100 experts from different stakeholder groups (namely corporate, academia, NGOs) and sectors (e.g. agriculture, forestry, technological removals companies, etc.). A draft for pilot testing and public consultation was released in Q3 2022 following TWG and LSR AC feedback on an earlier draft.

Pilot testing and public consultation resulted in over 4,000 comments from more than 300 external reviewers, 96 pilot testing companies, and supporting partners. Feedback was discussed with the LSR TWG, and a set of 42 key issues were identified. Resolution was reached on 38 of these issues via a consensus-based TWG process. In 2024, the LSR AC reviewed, proposed some revisions to, and approved the TWG proposals for all resolved issues.

The LSR AC further discussed the four remaining issues, resolving two of them. The LSR AC agreed that the two outstanding issues, agricultural leakage and forest carbon accounting (FCA), should be rolled into the new GHG Protocol governance structure and associated procedures. This decision was publicly announced in February 2025.¹

3.3 LSRS Development under current GHG Protocol governance structure

Agricultural Leakage

The issue of leakage was taken up directly by the ISB on February 25, 2025. The ISB was provided with prior communications on the topic from external stakeholders, a compilation of LSR AC feedback on the topic, and an issue paper providing background on the process to-date and summaries of the proposed leakage quantification approaches under discussion. The Secretariat developed five key questions and an option-set informed by the above-referenced materials for ISB deliberation and decision. Consensus was developed via a subgroup of self-selected ISB members and a decision taken by the full ISB on May 1, 2025 to adopt the subgroup’s proposal (see section 5.1 for additional details on the ISB’s agricultural leakage decisions and the associated rationales).

¹ See <https://ghgprotocol.org/blog/ghg-protocol-announces-forest-carbon-accounting-technical-working-group-and-updated-timeline>.

Forest Carbon Accounting

The ISB did not reach consensus on the appropriate FCA methodology for a company's physical inventory, and will request additional public information to inform its future deliberations.

AC "Red Flag" Review

On April 4th, the Secretariat sent the AC the draft LSRS text for review through May 2nd, 2025, for the purpose of closing out all issues resolved by the LSR TWG and AC. AC members were asked to identify 'red flags', related to the following categories:

1. **Process:** a section of the text does not match the AC members' understanding of how the AC advised the Secretariat to proceed on the implicated topic; or
2. **Decision-making criteria:** a section of text that the AC members believe does not adhere to the GHG Protocol decision-making criteria and hierarchy as such considerations had not already been identified when the LSR TWG and AC previously discuss the implicated issue.

The Secretariat received and processed 168 comments from 13 AC members against the above scope criteria. Of the 168 comments received, 145 (86%) were determined to fall outside the scope of the review and 23 (14%) were determined to appropriately fall within the scope.

Of the latter, nine (9) in-scope AC comments were directly addressed by the Secretariat as they were not related to ISB decisions under the new governance model. Fourteen (14) AC comments were determined to be related to ISB decisions on leakage and FCA, along with one additional comment flagged by the Secretariat based on the ISB agricultural leakage decision, for which the Secretariat sought ISB approval on their responses. Thereof, seven (7) comments related to FCA will be revisited in future ISB deliberations on FCA.

4 Scope of Decisions and Ratification

4.1 Scope of Independent Standards Board Decisions

The scope of the ISB decisions related to the LSRS and any associated guidance is limited to the following topics:

- 1) Agricultural leakage
- 2) Forest Carbon Accounting
- 3) Approval of responses to AC 'red flag' review comments related to either of the above topics.

4.2 Scope of Steering Committee Ratification

The scope of SC ratification is limited to whether the ISB adhered to due process in their decisions on the following topics within the LSRS:

- 1) Agricultural leakage;
- 2) Forest Carbon Accounting;
- 3) Approval of responses to AC 'red flag' review comments related to either of the above topics.

Topics developed and completed during the previous governance model are not open for SC review and ratification.

As there is not yet an ISB decision on FCA, the SC will limit its ratification to the ISB decision on agricultural leakage and approval of responses to AC 'red flag' review comments related to agricultural leakage and FCA.

The SC shall ratify decisions of the ISB based on whether the *GHG Protocol Standard Development and Revision Procedure* was followed for the above in-scope topics. The SC's remit does not include revisiting the content of the standard and shall be limited to whether due process was followed.

5 Rationale for ISB Decisions

5.1 Agricultural Leakage

At the ISB’s eighth meeting on March 27, 2025, the ISB decided to form an agricultural leakage subgroup to develop a proposal for the full ISB’s review and consideration. The agricultural leakage subgroup of the ISB consisted of seven ISB members, including the ISB Chair. The agricultural leakage subgroup of the ISB met for three two-hour sessions on March 2, 10, and 17, with subgroup members exchanging written views by email in between sessions.

At the ISB’s ninth meeting on April 28, 2025, the agricultural leakage subgroup of the ISB presented its recommendations to the full ISB related to five key questions previously deliberated by the full ISB over three meetings and subsequently in the subgroup. Remaining points of disagreement were discussed and consensus was reached on amendments to the proposal. The recommendation options considered, final recommendations, and their associated rationales are summarized in Table 2.

The ISB adopted the subgroup proposal via electronic vote following the meeting:

For adoption of the proposal: 10
 Against adoption of the proposal: 1
 Abstentions: 0

Table 2. Summary of ISB Agricultural Leakage subgroup proposal

	Key Question	Options Considered		Decision	Rationale
1	Is accounting for and reporting agricultural leakage required or recommended?	A. Required B. Recommended		Required	The ISB concluded that agricultural leakage presents a significant risk of emissions that would be systematically undercounted without a mandatory reporting requirement. Absent a mandatory requirement, reporting entities that are engaged in activities with a high risk of leakage would be able to avoid reporting these emissions. This would work at cross purposes with the Greenhouse Gas Protocol’s principles of relevance, completeness, and accuracy. To help balance the importance of addressing the risk of underreporting of land carbon leakage with concerns about the burden of increased reporting obligations, the ISB decided to adopt a mandatory reporting requirement that is triggered by a tailored list of high-risk activities (per item #3 below), rather than triggered by generic conditions that could apply more broadly.
2	What quantification approach is used to quantify land	General approaches	A. Project-based (general)	Carbon opportunity cost (COC only, with footnote for regulations)	The ISB evaluated the strengths and weaknesses of alternative quantification methodologies. The ISB determined that general project-based accounting was too flexible and unconstrained to produce consistency across
		Land carbon	B. Project-based (iLUC only) C. Carbon opportunity		

	carbon leakage?	leakage only	cost (COC only, with footnote for regulations and GHG programs) D. Flexible approach (iLUC or COC)	and GHG programs)	leakage estimates. Although the ISB observed that iLUC modeling provides relatively more consistency compared to general project-based methods, the ISB also noted that iLUC leakage estimates vary widely based on non-empirical assumptions. Furthermore, the range of results reported in the literature using iLUC methods has not narrowed over time, raising questions about the consistency and accuracy of this quantification methodology. In contrast, the ISB observed that COC methods rely substantially less than iLUC methods on non-empirical assumptions about economic behavior and therefore provide for more consistency. While COC methods by design do not capture emission reductions associated with changes in production or consumption outside the boundaries of a reporting entity, the ISB determined that COC quantification methods are well-documented in the peer-reviewed literature, are substantially less dependent than iLUC methods on non-empirical economic assumptions, and are appropriately tailored to the list of high-risk activities that trigger a mandatory reporting requirement (per item #3 below). The ISB concluded that the advantages of COC methods outweigh their limitations in this application. The ISB also observed that the recommendation to target-setting programs to include land carbon leakage also provides flexibility for target-setting programs in how they incorporate land carbon leakage estimates using COC quantification methods (per item #5 below). The ISB acknowledged potential implementation challenges to be addressed via development of a quantification tool and phase-in period.
3	What triggers land carbon	A. Implementation of activities with high risk for land		List of activities	The ISB determined that while changes in annual land

	leakage quantification?	carbon leakage (with modification to specific proposed activities) B. Changes in annual land occupation	with high risk for land carbon leakage	occupation are often relevant to leakage risks, it is more appropriate to tailor a mandatory quantification requirement using a list of activities with high risks for land carbon leakage. The ISB concluded that it would be less appropriate to trigger a mandatory reporting obligation based on changes in annual land occupation because this requirement could be overbroad and because leakage risks may be significant regardless of whether a reporting entity experiences changes in annual land occupation. The ISB carefully deliberated the selected triggering language to ensure that it would capture the highest-risk activities (notably, the diversion of agricultural products to non-food, non-feed uses) without imposing unintended reporting obligations on sustainable food production systems.
4	Is leakage aggregated (i.e., "netted") with other emissions and removals in the reporting?	A. If companies aggregate land sector emissions, require companies to include land carbon leakage (with modification) B. No requirement on aggregation of land carbon leakage	If companies aggregate emissions or net emissions and removals, require companies to include land carbon leakage in a separately reported aggregated category	The ISB determined that, when quantification is triggered, land carbon leakage should be included in any aggregation of emissions or netting of emissions and removals because those are the conditions under which the consequences of underreporting land carbon leakage is most significant. If reporting entities were not obligated to include land carbon leakage when aggregating emissions or netting emissions and removals, then any such aggregation or netting would be incomplete and could provide a misleading or inaccurate view of the reporting entity's overall emissions profile. Conversely, a requirement to include carbon leakage in any aggregation of emissions or netting of emission and removals improves relevance, completeness, and accuracy.
5	How should leakage emissions be included in targets?	A. Recommend regulations and target setting programs include leakage in relevant targets (with modification)	Recommend regulations and target setting programs include	The ISB determined that it was appropriate to recommend that regulations and target-setting programs include leakage because leakage quantification would be required only when

		<p>B. Recommend separate targets for land carbon leakage</p>	<p>leakage in relevant targets</p>	<p>reporting entities are engaged in activities with a high risk of leakage. By making such a recommendation without prescribing how leakage should be incorporated into target-setting applications, this approach clarifies that the GHG Protocol has identified a significant issue that is relevant to target-setting while providing flexibility to external programs in how they incorporate land carbon leakage into their activities.</p>
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5.2 Forest carbon accounting

The ISB did not reach consensus on the appropriate FCA methodology for a company’s physical inventory, and will request additional public information to inform its future deliberations. As a result, FCA will not be included in the LSRS v1.0.

5.3 Approval of responses to AC ‘red flag’ comments on ISB-related topics

At the ISB’s fourteenth meeting on September 22, 2025, the Secretariat shared a document summarizing AC ‘red flag’ comments related to ISB-related topics, proposed edits to the LSRS to address these comments, and proposed related responses to AC members. ISB members reviewed the materials prior to the meeting and discussed the proposal during the meeting on September 22, 2025. The proposal was adopted via the ISB’s voting procedure.

For: 8
Against: 2
Abstentions: 2

The proposed edits have already been included in the LSRS shared with the SC for ratification.